October 18, 2010

Water Docket
Environmental Protection Agency
Mailcode: 28221T
1200 Pennsylvania Avenue. NW
Washington, DC 20460

Re: Docket EPA-R03-OW-2010-0736

To Whom It May Concern:

Please find attached comments from Global Tungsten & Powders Corp. on the proposed U.S. Environmental Protection Agency Chesapeake Bay TMDL (Docket EPA-R03-OW-2010-0736) and the Pennsylvania Chesapeake Bay Watershed Implementation Plan.

Please contact me at 570-268-5128 or by email at Carmen.Venezia@globaltungsten.com if you have any questions.

Thank you.

Sincerely,

Carmen Venezia
Manager, Safety and Environment

cc: Department of Environmental Protection
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Global Tungsten & Powders Corp. Comments on the Proposed U.S. Environmental Protection Agency Chesapeake Bay TMDL (Docket EPA-R03-OW-2010-0736) and the Pennsylvania Chesapeake Bay Watershed Implementation Plan

October 18, 2010

Global Tungsten & Powders Corporation ("GTP") appreciates the opportunity to address these comments to the U.S. Environmental Protection Agency ("EPA") and the Pennsylvania Department of Environmental Protection ("DEP") concerning the proposed Chesapeake Bay Total Maximum Daily Load ("TMDL") and the associated Pennsylvania Chesapeake Bay Watershed Implementation Plan ("WIP"). GTP is addressing these comments jointly to EPA and DEP because of the integral relationship between the TMDL and WIP.

Background

GTP is the current owner and operator of a nearly 70-year-old substantial manufacturing facility located along the Susquehanna River in North Towanda Township, Bradford County, Pennsylvania (the "GTP Facility"). The GTP Facility, which was formerly operated by Osram Sylvania, produces and processes via chemical purification and powder metallurgy, various nonferrous metals. Started in 1941, the GTP Facility has developed into the leading supplier of powders, semi-finished products and components made from tungsten, molybdenum and light-emitting chemicals known as phosphors.

Currently, GTP employs some 900 workers and staff, making it the largest employer in Bradford County and one of the largest employers in all of northcentral Pennsylvania. For many decades, the GTP Facility has been the lynchpin of the Towanda economy, and both our roots and commitment to the welfare of our community run long and deep.

At the same time, the GTP Facility plays an important part in strategic materials production within our nation. We are one of the few producers of tungsten materials and alloys, which are utilized in a variety of applications in the machine tool, electronics, automotive, aerospace and defense industries, among many others. One of the GTP Facility's largest customers (both directly and indirectly) is the United States government, which relies on our output for a number of strategic uses.

In its wide and varied production processes, the GTP Facility generates various wastewaters, including process wastewater, cooling tower blowdown, boiler blowdown, non-contact cooling water, steam condensate, and stormwater, which are discharged via four outfalls to the Susquehanna River pursuant to an NPDES Permit issued by DEP. Unlike almost all of the other NPDES permit regulated sources of nutrients in the Susquehanna Basin, nitrogen and phosphorus loadings at the GTP Facility are unrelated to organic loadings – we are not a high BOD generating facility. To the contrary, the production processes at GTP involve inorganic chemicals and inorganic processes, and hence many of the treatment processes that might be considered for sources such as sewage treatment plants and those industries with organic sources of nitrogen or phosphorus are simply inapplicable and unusable at the GTP Facility.

GTP's Efforts at Nutrient Reduction and Management

GTP, along with other major industries in the Basin, has sought to work with the Pennsylvania DEP through the past decade in developing realistic, rational and workable approaches to allocating nutrient reduction targets and achieving those targets in an effort to meet the objectives of controlling Pennsylvania's loadings into the Chesapeake Bay.

Over the past decade, the GTP Facility has taken concerted actions, through process changes and other measures, to reduce nitrogen in our wastewaters – in the process earning the Governor's Award for Environmental Excellence in September 2002 recognizing our leading and voluntary efforts to reduce nitrate discharges by some 1 million pounds per year. That same year, we earned a Business for the Bay award for outstanding achievement in nutrient reduction. We have clearly demonstrated our willingness to do our fair share in addressing the Bay's needs, long before regulatory mandates.

Further, as DEP and EPA are well aware, significant point sources (both POTWs and industries) have worked with DEP and other stakeholders over the past decade in working through the many issues that are inherent in arriving at a workable and fair watershed implementation plan. This process has not been easy, and sacrifices, investments, and burdens have had to be borne by all major point sources. The fundamental framework for the Pennsylvania WIP, as applicable to point sources, was worked out as part of Pennsylvania's Chesapeake Bay Tributary Strategy and the subsequent Chesapeake Bay Steering Committee. That framework set specific objectives for nitrogen and phosphorus loadings from major point sources, recognizing that in

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Pennsylvania all point sources taken together amount to just 12% of all nitrogen loads, 29.6% of all phosphorous loads, and a mere 0.6% of sediment loads generated in Pennsylvania that are delivered to the Bay.[1] Put another way, non-point source loads are and remain the vast majority of nutrient and sediment loadings to the Bay – and even if every sewage treatment plant and industry shut down, those non-point source loadings would remain a loading challenge to the Bay.

Thus, the Pennsylvania Chesapeake Bay Tributary Strategy, and the proposed Pennsylvania WIP that built upon that strategy as submitted to EPA in late September 2010, set specific loading targets for each significant sewage plant and industrial discharger (including the GTP Facility). For industries, DEP applied the Chesapeake Bay Industrial Wastewater Compliance Plan dated January 2010 (the "2010 Compliance Plan"), to allocate Total Nitrogen and Total Phosphorus loadings to all major industrial users. Applying the 2010 Compliance Plan, in early March 2010, DEP issued letters to each major industrial facility under 25 Pa. Code §92.8a, requiring the submission of plans and schedule to meet the proposed Nitrogen and Phosphorus cap loads. Those submissions were due in early September 2010, and we submitted such a plan and schedule.

Under the 2010 Compliance Plan, DEP has calculated certain nutrient cap loads for the GTP Facility, consisting of a Total Nitrogen Cap of 600,515 pounds per year and a Total Phosphorus Cap of 1,577 pounds per year. Our plan of action to meet those loading limits was submitted on August 26, 2010, and we are currently in the midst of implementing the action steps outlined in that plan.

As indicated in our compliance plan and schedule, with the process and operational changes already underway at the GTP Facility, coupled with our existing treatment processes, GTP believes that it will be able to achieve compliance with the TN cap load limit proposed in Pennsylvania WIP and set forth in DEP's March 2010 §92.8a notice. The TP Cap is a bigger challenge – not because we are a large contributor of phosphorus, but rather because our phosphorus loadings are highly variable and compared to water volume are relatively low. We set forth in our plan a 15-step process to achieve the target phosphorus loadings, and are

[1] Percentages based on table entitled "Pennsylvania 2009 Nutrient and Sediment Loads Delivered to Chesapeake Bay EPA Phase 5.3 Watershed Model" in the Pennsylvania Chesapeake Watershed Implementation Plan (Sept. 2010) at pg. 13.

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currently at step 6 – having completed jar tests and design work, and having submitted to DEP plans for modifications to our treatment plant that we are hopeful will allow us to meet the cap load. We are scheduled to proceed with those treatment plant modifications upon plan approval from DEP, with the target of completing construction within 11-13 weeks from approval.

All of these efforts do not come without significant effort and investment – as we have tried to move rapidly and responsibly to meet the targets set in the Pennsylvania WIP even before it has been finally adopted. That investment must be viewed in the context of a business climate that is best described as extremely challenging where all entities, including ours, has been affected by a recession of global dimensions. We are enduring costs that are not readily passed on to customers, given the nature of global competition and competitive margins in the inorganic chemicals market. We are willing to do our part, but it is not easy.

The Pennsylvania WIP vs. the EPA Backstop TMDL

If the process of achieving the objectives for the Bay is going to be at all successful, the allocation of loadings and associated burdens must be fair, reasonably achievable and predictable. Municipalities and industries have been taking concerted actions and making substantial investments based on the allocations that have been developed over the past decade, and incorporated into the Pennsylvania WIP.

While the Pennsylvania WIP is not perfect, we believe it represents a reasonable framework and an attempt to rationally allocate nutrient loading reductions among all sectors who contribute these constituents to the watershed system.

While the Pennsylvania WIP tries to allocate reductions fairly among all sectors, EPA has taken a posture that we believe is irrational, unattainable, arbitrary and counterproductive. In its comments dated September 27, 2010, EPA has purported to find that the Pennsylvania WIP is deficient in failing to provide "reasonable assurance" that the reductions would be achieved in all identified sectors. In particular, EPA claims that the actions identified to address non-point sources, such as agriculture, stormwater, forests and on-lot septic systems, were not adequately described or sufficient. To address these "gaps", EPA has proposed what it calls a "Back Stop TMDL." Rather than framing actions to address the sectors that purportedly are not doing their share, EPA proposes to shift the burden of reductions from these non-point sectors to municipal treatment plants and industries.

Under EPA's proposed Backstop TMDL, EPA proposes to push every municipal treatment plant to the "limits of technology" and beyond that proposes allocations to industries (such as the GTP Facility) that are well beyond any known technology. EPA has described the limits of technology for POTWs as achieving 3 mg/l of nitrogen and 0.1 mg/l of phosphorus – although there are in fact very few treatment plants in the U.S. that have achieved those concentrations consistently.

But EPA's approach to industry is even more unreasonable and arbitrary. Without evaluating the industries involved, or what measures they each have in fact already put in place to reduce nutrients, EPA explains that the method used to come up with the numbers in the Backstop TMDL made "the assumption that the loads are reduced below the loads identified in the jurisdiction's draft Phase I WIP at a rate equivalent to significant municipal WWTPs going from the WIP loading level to an E3 loading level (down to 3 mg/L TN and 0.1 mg/L TP). In translation, as we understand this, EPA calculated an average percentage reduction in loadings that municipal wastewater treatment plants might make to achieve the limits of technology, and then applied the same percentage to every industry – irrespective of the current situation at each industry, and irrespective of whether their situation was anything at all like a municipal treatment plant.

The result, buried in Table Q2 of the EPA TMDL, is quite astonishing. For the GTP Facility, EPA has proposed to reduce Total Nitrogen loadings from the level that the Pennsylvania WIP assigns (600,515 lbs/year) to just 3,693 lb/year, and to reduce Total Phosphorus loads from the Pennsylvania WIP value (1,577 lb/year) to 31 lb/year. Based on the GTP Facility's flow rates, the EPA Backstop TMDL would equate to requiring a Total Nitrogen concentration of around 1 mg/l or less, and at Total Phosphorus concentration of less than 0.01 mg/l.

These resulting concentration values are well beyond (indeed, for phosphorus, one order of magnitude below) what EPA itself has acknowledged are the limits of technology. The EPA Backstop TMDL blithely suggests that perhaps the difference could be made up by purchasing credits – but as EPA well knows, there are nowhere near the number of credits available or predicted to be available to cover these values. Moreover, EPA's other comments on the Pennsylvania WIP draw into serious question whether the Pennsylvania credit trading program will remain viable (as EPA seems to be requiring that the baseline for creating credits be redefined from that used to create credits to date).

In the short time available since release of the EPA Backstop TMDL, GTP has attempted to review whether there are any viable technological solutions to even come close to the values EPA has proposed to impose.

Because of the unique characteristics of our production process and wastewater (which as noted above is almost entirely inorganic, not organic-based like sewage treatment plants), the GTP Facility cannot use biological treatment processes. Hence, the technologies that EPA considers to possibly be available to meet the limits of technology (what EPA describes as 3 mg/l of TN and 0.1 mg/l of TP) would not be effective or applicable to our situation. To even conceivably approach the levels that EPA describes as limits of technology (which are higher than what EPA has proposed to impose in the Backstop TMDL) would essentially require some combination of evaporation, crystallization, membrane separation, filtration, and revamped processes allowing recirculation, at astronomical costs, and engendering significant consumption of natural gas, electricity, and attendant NO_x and other emissions. A preliminary, conservative estimate is that such a system would cost on the order of $60 million, and engender operating costs of some $35,000 per day ($12,800,000 per year). The result would be to render operation of the GTP Facility uneconomic and unsupportable.

What we can advise you today is that if EPA were to impose the Backstop TMDL and the values set forth in Table Q2 were imposed in an NPDES permit, GTP would have virtually no choice but to shut down the entire GTP Towanda Plant – leaving more than 900 dedicated and very hardworking employees without a job, and depriving a community of its largest and longest-standing employer. Such a result would not be our choice, but the result of a poorly-conceived, thoughtless, irrational and wholly arbitrary decision by EPA to punish municipalities and industries for the alleged inadequacies in efforts by other sectors to reduce their nutrient loads. Instead of tackling the real challenges in a constructive manner, EPA proposes to shoot and kill those who are trying to do their part – in the process wasting hundreds of millions of dollars of public and private investments already underway to meet the Pennsylvania WIP objectives.

Where We Go From Here

While it is not perfect, we support in principle the Pennsylvania WIP as the only plan on the table that has a chance of ultimate success.

We support a watershed implementation approach that fairly distributes responsibilities, and where all contribute to the solution – a plan that incorporates actions that are reasonable and cost-effective. We believe that the Pennsylvania WIP is generally on the right track.

Throwing out the Pennsylvania WIP to impose a Backstop TMDL containing impossible and draconian mandates on December 31, 2010 will not achieve anything other than create a train wreck, and such a train wreck is not a viable pathway to achieve real Pay improvements. As our region and nation struggle to come out of the greatest economic downturn since the crash of 1929, now is not the time to waste time, taxpayer funds, and private resources – and it is not the time to take regulatory decisions that threaten to shut down industrial plants and displace employment.

To the extent that there are any implementation steps and programs for certain non-point sectors which need to be clarified or refined in the Pennsylvania WIP, then that's where efforts and resources should be directed – and EPA needs to give Pennsylvania a reasonable time to make those adjustments.

Respectfully submitted by:

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